

REMARKS

Claims 1-21 are in this application and are presented for consideration.

Applicant thanks the Examiner for removing the previous rejections.

The independent claims have been rejected as being obvious over Bahr (US 2001/0017134).

The rejection states that Bahr discloses all the features of applicant's claims except for the contactless interface. The rejection then appears to further state that contactless interfaces are well known and it would be obvious to substitute a well-known contactless interface for the contact type interface of Bahr. The reason being that it would be a mere substitution of one type of signal interface for another that would work or function equally as well in the Bahr device.

Applicant must respectfully disagree that the substitution of a contactless interface for a contact type interface is obvious. A contactless interface is much more complicated and expensive than a contact interface. A contactless interface needs structure to generate a contactless signal that will propagate across a non-electrical material, and also needs structure to receive this contactless signal. As an example, structure would be needed to either generate a varying electric field, a varying magnetic field, a combination of both, and/or an optical signal. While structure for generating and receiving such contactless signals is well known, the structure itself is much more complicated and expensive than a contact type connection. To convert a regular signal from, and into, a contactless signal requires a significant amount of effort. Therefore a person of ordinary skill would not be led to substitute a contactless interface

for a contact interface, without a good and sufficient reason to undertake the additional cost and effort.

It is only the present applicant who discloses reasons to use a contactless interface. This is disclosed in the present specification in paragraph 5. In particular, applicant has discovered that when the breathing tubes are regularly sterilized or disinfected, contact interfaces can degrade. Furthermore, repetitive use of the breathing tube with a contact interface can cause the contacts to wear down. This limits the usefulness of prior art breathing tubes such as a Bahr. The prior art of Bahr does not recognize these disadvantages of contact interfaces, especially in respiratory devices. It is only the present applicant who has sought to improve respirators with sensors at the distal end of a breathing tube, and who has discovered that the contact interfaces of the breathing tubes and sensors have disadvantages which limit the useful life of the breathing tubes and corresponding sensors. Furthermore, it is only the present applicant who provides a solution to the discovered problem of contact interfaces in breathing tubes.

A person of ordinary skill would have no indication from Bahr that the contact type interface has a disadvantage. Therefore this person of ordinary skill would have no reason to replace the contact interface with a contactless interface. Such a substitution would result in a respiratory device that was much more complicated and much more expensive, and the person of ordinary skill would have no idea why such a result would be beneficial. It is only the present application which has discovered the problem of contact type interfaces and has disclosed a solution. Therefore a person of ordinary skill in the art would not be led to contactless

interfaces, because such contactless interfaces are more difficult, and there is no reason in the prior art for the ordinary person to take on this additional difficulty.

The courts have decided “[A] patentable invention may lie in the discovery of the source of a problem even though the remedy may be obvious once the source of the problem is identified. This is part of the ‘subject matter as a whole’ which should always be considered in determining the obviousness of an invention under 35 U.S.C. § 103.” *In re Spinnoble*, 405 F.2d 578, 585, 160 USPQ 237, 243 (CCPA 1969). Therefore since the prior art has not discovered the problem, and there is no indication that a contactless interface would correct the problem, the present claims can not be obvious in view of the prior art. The rejection is therefore untenable and overcome.

Claims 5, 15 and 20 set forth that the line along the breathing tube also functions as a tube heater. Applicant finds no indication in Bahr of using a line along a tube to both transfer sensor signals, and to also heat the tube. Since this feature is not found in the prior art, these claims therefore further define over the prior art.

Claim 7 sets forth that the first inductive interface is designed to transmit a supply voltage to the sensor means in addition to the signals. Applicant finds no indication in Bahr of transmitting a supply voltage to a sensor in addition to signals. Claim 7 therefore further defines over the prior art.

If the Examiner has any comments or suggestions which would further favorable prosecution of this application, the Examiner is invited to contact applicant's representative by telephone to discuss possible changes.

At this time applicant respectfully requests reconsideration of this application, and based on the above amendments and remarks, respectfully solicits allowance of this application.

Respectfully submitted
for Applicant,



By: _____
Theobald Dengler
Registration No. 34,575
McGLEW AND TUTTLE, P.C.

TD:tf
71163-10

DATED: September 25, 2007
BOX 9227 SCARBOROUGH STATION
SCARBOROUGH, NEW YORK 10510-9227
(914) 941-5600

SHOULD ANY OTHER FEE BE REQUIRED, THE PATENT AND TRADEMARK OFFICE IS HEREBY REQUESTED TO CHARGE SUCH FEE TO OUR DEPOSIT ACCOUNT 13-0410.